

**DEPARTMENT OF MATHEMATICS**  
**MSc in Financial Mathematics 2021-22**

- Students must take a total of 2 options (30 credits) across Semester One and Two.
- The maximum number of credits **should not exceed 180** for the year.
- No more than 30 credits can be taken at level 6
- Email this form to [mps\\_pgtooffice@sussex.ac.uk](mailto:mps_pgtooffice@sussex.ac.uk) by **Thursday 23<sup>RD</sup> September 2021 - 12.00 noon.**
- Please note that the Department reserves the right to withdraw any of these modules.
- **No option module changes will be allowed after WEEK TWO of each Semester.**

Code	Title	Credit	Level	Tick Here
<b>SEMESTER ONE You will take 3 core modules:</b>				
831L1	Corporate Finance	15	7	✓
854G1	Financial computing with MATLAB	15	7	✓
G5078	Financial Mathematics	15	7	✓
<b>Select 1 or 2 Optional Modules for Semester One from the list below. If you select only 1 module for Semester One, you must also pick an optional module for Semester Two. Please also choose an alternative choice and number this as 2.</b>				
G5106	Introduction to Mathematical Biology	15	6	
G1107	Linear Statistical Models	15	6	
G1114	Partial Differential Equations	15	6	
G1100	Probability Models	15	6	
852G1	Advanced Numerical Analysis	15	7	
851G1	Functional Analysis	15	7	
823G5	Programming through Python <i>[Informatics]</i>	15	7	
850G1	Measure and Integration	15	7	
898F3	Programming in C++ <i>[Physics]</i>	15	7	
<b>SEMESTER TWO You will take 4 core modules:</b>				
832G1	Mathematical Models in Finance and Industry	15	7	✓
849G1	Financial Portfolio Analysis	15	7	✓
821L1	Financial and Time Series Econometrics <i>[Economics]</i>	15	7	✓
<b>If you have <u>not</u> chosen 2 Semester Two optional modules, please select 1 Optional Module for Semester Two from the list below. Please also choose an alternative choice and number this as 2.</b>				
G1158	Continuum Mechanics	15	6	
867G1	Statistical Inference	15	7	
G5126	Dynamical Systems	15	6	
840G1	Perturbation Theory and Calculus of Variations	15	6	
866G1	Advanced Partial Differential Equations	15	7	
861G1	Financial Investment and Corporate Risk Analysis	15	7	
845G1	Numerical Solution of Partial Differential Equations	15	7	
865G1	Monte Carlo Simulations	15	7	
517H3	Finite Element Analysis <i>[Engineering]</i>	15	7	
862G1	Random Processes (prerequisite: G1100 Prob. Models)	15	7	
860G1	Cryptography	15	7	
<b>SUMMER</b>				
843G1	MSc Dissertation (Financial Mathematics)	60	7	✓

**STUDENT DECLARATION**

I confirm that I have checked the syllabus and credit information and chosen my options accordingly.  
I understand it is my responsibility to ensure I meet the necessary syllabus and credit requirements.

**Student's Full Name** \_\_\_\_\_

**Student's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**For advice about your module choices see your Course Convenor; Dr Qi Tang.**